



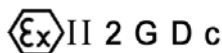
Ball Valves PN 20/50 (Class 150/300) IITFM Construction (Low Temperature Stainless Steel)

Index



Fig. 515/530 "CRYOGENIC SERVICE" API 6D and BS 6364

Manufacturing program:



LICENSE NO. 6D-0197

Quality & Environmental Management:



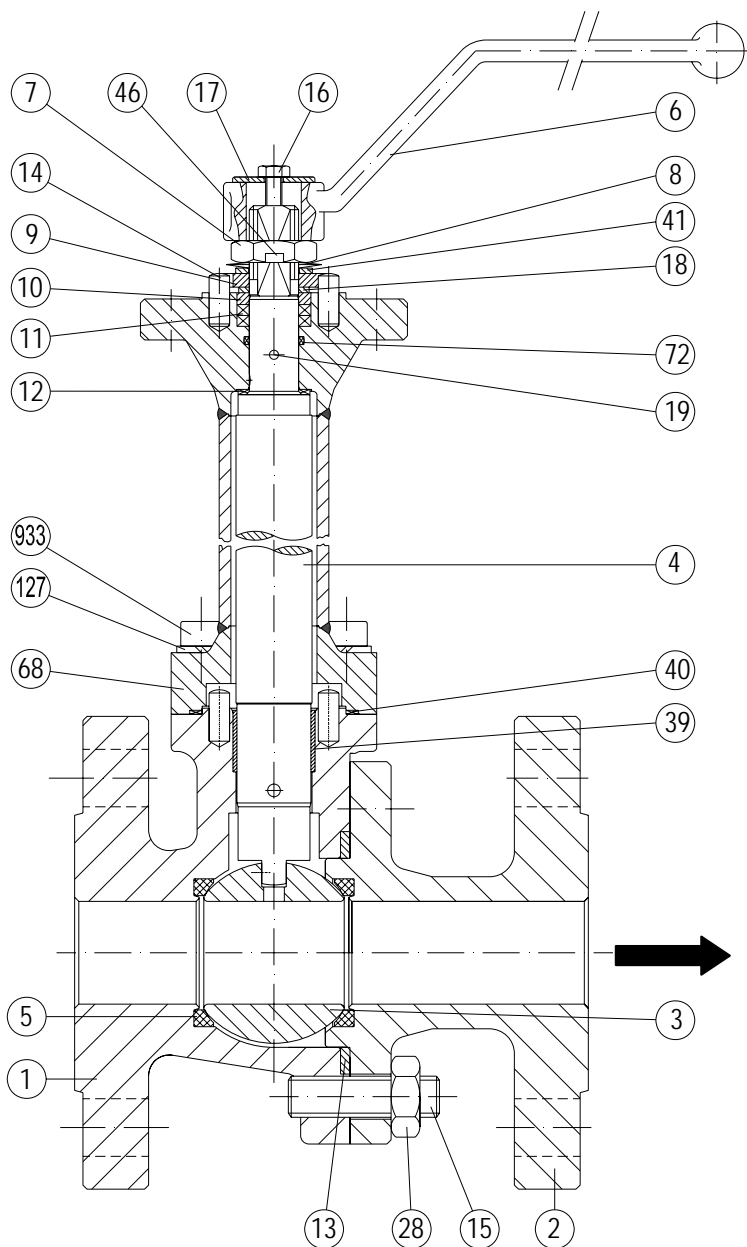


Ball Valves PN 20/50 (Class 150/300)

DN 15 - 200 (½" – 8") PN 20 (Class 150)

DN 15 - 150 (½" – 6") PN 50 (Class 300)

Parts and materials



Item	Description	Material
1	Body	A 351 Gr. CF8M
2	Body connector	A 351 Gr. CF8M
3	Ball	S.S. Type 316
4	Stem	A 276/479 Tp. 316
5	Seat ring	TFM 1600
6	Wrench	Nodular Iron
7	Gland nut	AISI 303
8	Disk spring	E.N.P. Carbon St.
9	Stop plate	AISI 304
10	Gland	AISI 316
11	Gland packing	Graphite
12	Stem thrust seal	PTFE + 50% Stainless Steel
13	Body connector seal	AISI 316L + Graphite
14	Stop pin	Stainless St.
15	Stud (DN 15 Bolt)	A 193 Gr. B8M
16	Bolt	DIN 933 A2
17	Washer	AISI 304
18	Thrust washer	25% G.F. + PTFE
19	Antistatic device	Stainless St.
28	Nut (DN 20 to 200)	A 194 Gr. 8M
39	Stem bushing	DI + PTFE
40	Gasket	Graphite
41	Spacer (DN 40 to 200)	AISI 304
46	Washer	AISI 304
68	Extension shell	AISI 316L
72	"O" Ring	Viton
89	Identification plate	Stainless St.
127	Washer	AISI 316
933	Bolt	A 193 Gr. B8M

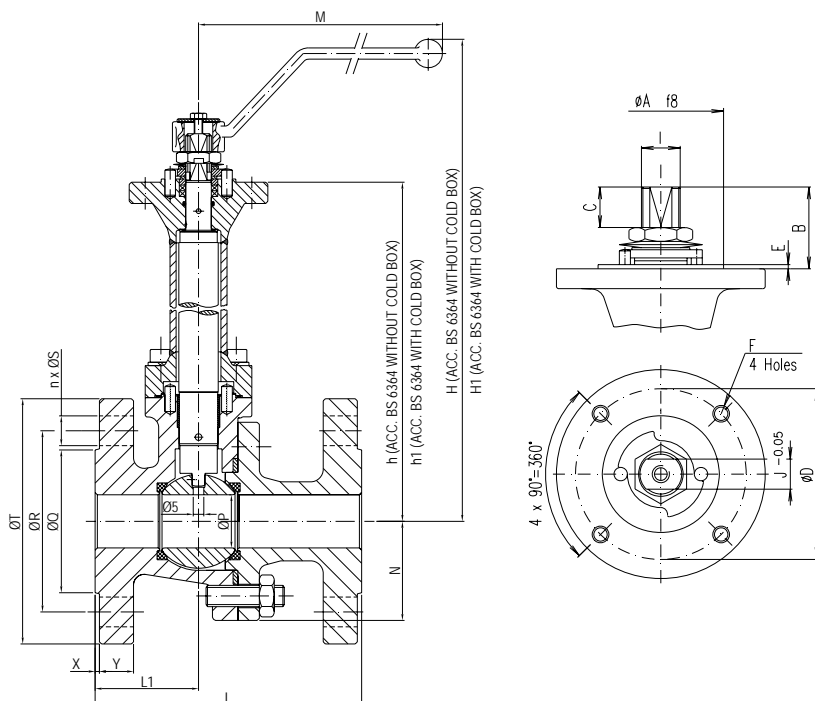


Ball Valves PN 20/50 (Class 150/300)

DN 15 - 200 (½" – 8") PN 20 (Class 150)

DN 15 - 150 (½" – 6") PN 50 (Class 300)

Dimensions



CAVITY RELIEF
DETAIL



Series 515 (Class 150)

DN	ØP	L	L1	ØQ	ØR	n x ØS	ØT	X	Y	h	h1	N	H	H1	M	WEIGHT
15 (½")	15	108	47	34,9	60,3	4x15,9	90	1,6	9,5	46		---	110		164	
20 (¾")	20	117	50	42,9	69,9	4x15,9	100	1,6	11,1	53		---	117		164	
25 (1")	25	127	52	50,8	79,4	4x15,9	110	1,6	12,7	58		---	129		164	
40	40	165	65	73	98,4	4x15,9	125	1,6	15,9	76		---	148		213	
50 (2")	50	178	61	92	120,7	4x19	150	1,6	17,5	83,5		---	155		213	
65	65	190	75	104,8	139,7	4x19	180	1,6	20,6	97		---	169		348	
80 (3")	80	203	79	127	152,4	4x19	190	1,6	22,2	111		---	207		445	
100 (4")	100	229	90	157,2	190,5	8x19	230	1,6	22,2	133		120	231		495	
150 (6")	151	394	174	216	241,3	8x22,2	280	1,6	23,8	183		168	298		698	
200 (8")	203	457	200	270	298,5	8x22,2	345	1,6	27	233		208	352		868	

(*) Dimensions in mm and weight in kg.

Series 530 (Class 300)

DN	ØP	L	L1	ØQ	ØR	n x ØS	ØT	X	Y	h	h1	N	H	H1	M	WEIGHT
15 (½")	15	140	60	34,9	66,7	4x15,9	95	1,6	12,7	46		---	110		164	
20 (¾")	20	152	65	42,9	82,6	4x19	115	1,6	14,3	53		---	117		164	
25 (1")	25	165	70	50,8	88,9	4x19	125	1,6	15,9	58		---	129		164	
40	40	190	80	73	114,3	4x22,2	155	1,6	19	76		---	148		213	
50 (2")	50	216	87	92	127	8x19	165	1,6	20,6	83,5		---	155		213	
80 (3")	80	283	118	127	168,3	8x22,2	210	1,6	26,9	111		---	207		445	
100 (4")	100	305	133	157,2	200	8x22,2	255	1,6	30,2	133		120	231		495	
150 (6")	151	403	160	216	269,9	12x22,2	320	1,6	35	183		168	298		698	

(*) Dimensions in mm and weight in kg.

Actuator connection

DN	ISO 5211	ØA	B	C	ØD	n x F	G	I
15 (½")	F05	35	11,2	5,7	50	4x M6	1,5	M12x1.5
20 (¾")	F05	35	13,2	9,2	50	4x M6	1,5	M12x1.5
25 (1")	F05	35	22,7	10,2	50	4x M6	1,5	M12x1.5
40 (1½")	F07	55	41,5	19,2	70	4xM8	3	M18x1.5
50 (2")	F07	55	41,5	19,2	70	4x M8	3	M18x1.5
65 (2½")	F07	55	44	19,7	70	4xM8	3	M22x1.5
80 (3")	F10	70	44,5	19,7	102	4xM10	3	M25x1.5
100 (4")	F10	70	56,5	29,2	102	4xM10	3	M28x1.5

(*) Dimensions in mm



Ball Valves PN 20/50 (Class 150/300)

DN 15 - 200 (½" – 8") PN 20 (Class 150)

DN 15 - 150 (½" – 6") PN 50 (Class 300)

General Characteristics, Torque & KV, P&T Rating

GENERAL CHARACTERISTICS	Fig.515/530 Series SFF	Split Body	Floating Ball	Full Bore
DESIGN STANDARDS				
Valves design	API 6D	ASME B16.34	EN ISO 17292	EN 1983
Body design	ASME VIII Div.1			
Shell thickness	ASME B16.34	EN ISO 17292		
Flanges	ASME B16.5 Raised face			
Face to face dimensions	ASME B16.10 Long pattern	API 6D	EN 558	
Actuator mounting flange	ISO 5211			
Wetted parts materials and bolting	NACE MR.01.75			
Shell finishing quality	MSS SP 55			
Marking	API 6D	EN 19	EN 19	CE - PED EN 19
TESTS AND CERTIFICATES				
Quality Assurance	ISO 9001	API Q1	CE - PED	
Pressure testing	API 598	EN 12266	ISO 5208	EN 12266 EN 12266
Other	ISO 14001	ATEX		

Torque Values in Nm

VALVE SIZE	AT DIFFERENTIAL PRESSURE		VALVE SIZE	AT DIFFERENTIAL PRESSURE	
	Class 150	Class 300		Class 150	Class 300
	20 bar	50 bar		20 bar	50 bar
DN 15 (½")	24	36	DN 65 (2½")	180	
DN 20 (¾")	30	48	DN 80 (3")	270	450
DN 25 (1")	45	60	DN 100 (4")	450	690
DN 40 (1½")	75	105	DN 150 (6")	750	1026
DN 50 (2")	120	165	DN 200 (8")	1050	

Kv Values in m³/h

DN 15 (½")	DN 20 (¾")	DN 25 (1")	DN 40 (1½")	DN 50 (2")
20	40	75	170	270
DN 65 (2½")	DN 80 (3")	DN 100 (4")	DN 150 (6")	DN 200 (8")
550	1000	1650	4200	9000

Pressure-Temperature

For A 351 Gr. CF8M only. For other materials consult ASME B16.34

